Performance of Community Health Workers

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CHAPTER 8. Optimizing the benefits of community health workers' unique position between communities and the health sector: A comparative analysis of factors shaping relationships in four countries

Abstract

Community health workers (CHWs) have a unique position between communities and the health sector. The strength of CHWs' relationships with both sides influences their motivation and performance. This qualitative comparative study aimed at understanding similarities and differences in how relationships between CHWs, communities and the health sector were shaped in different Sub-Sahara African settings.

The study demonstrates a complex interplay of influences on trust and CHWs' relationships with their communities and actors in the health sector. Mechanisms influencing relationships were feelings of (dis)connectedness, (un)familiarity and serving the same goals, and perceptions of received support, respect, competence, honesty, fairness and recognition. Sometimes, constrained relationships between CHWs and the health sector resulted in weaker relationships between CHWs and communities. The broader context (such as the socio-economic situation) and programme context (related to for example task shifting, volunteering and supervision) in which these mechanisms took place were identified.

Policy makers and programme managers should take into account the broader context and could adjust CHW programmes so that they trigger mechanisms that generate trusting relationships between CHWs, communities and other actors in the health system. This is needed to enable CHWs to perform well and respond to the opportunities offered by their unique intermediary position.

8.1 Background

Community Health Workers (CHWs) form an important point of interconnection between communities and the rest of the health system. CHWs are defined as health workers carrying out functions related to health care delivery; trained in some way in the context of the intervention, and having no formal professional or paraprofessional certificate or degree in tertiary education (Lewin et al. 2010). There are many different types of CHWs. They may address single or multiple health issues and have differences in their levels of knowledge and training, remuneration and practice settings (Bloom and Standing 2001). CHWs are often believed to increase equitable access to health care in low- and middle-income countries with constrained human resources for health (Bhutta et al. 2010; Glenton et al. 2013). They act as intermediaries between communities and the health sector, and are sometimes referred to as cultural brokers, as they understand the socio-cultural norms of the communities they work in and are thus well accepted by these communities (Maes and Kalofonos 2013). The unique intermediary position of CHWs is therefore central to health system performance in these settings.

Many studies have demonstrated the effectiveness of CHWs in delivering key health interventions (Lewin et al. 2010) and the performance of CHWs remains an area of global focus. At the individual level, performance is influenced by factors like resource availability, competence and motivation. Contextual factors, such as socio-cultural and gender norms and health policies, combined with intervention related factors, such as training and supervision, can have a direct influence on motivation and performance (Kok et al. 2014; Kok et al. 2015a; Naimoli et al. 2014). Motivation and performance are complex social processes linked to feelings of self-fulfilment, achievement and recognition, that are for a large part generated through interactions between health workers, communities served and the rest of the health system (Franco et al. 2002). Health workers' capacity and motivation to deliver quality care depends on their knowledge and skills, as well as their values and goals, which are continuously developed and adapted in relation to people in their environment (Rowe et al. 2005). The recognition that health workers are social actors points to the importance of intervention designs that stimulate and support trusting relationships, defined as respectful, fair and cooperative interactions between individuals (Gilson 2003; Okello and Gilson 2015).

There has been a growing interest in trusting relationships and their positive influence on health worker motivation and performance (Calnan and Rowe 2007; Gidman, Ward, and McGregor 2012; Gilson et al. 2005; McCabe and Sambrook 2014). Many studies focus on workplace trust: trust of the health worker in colleagues, supervisors, managers and the employing organization as a whole (Albrecht and Travaglione 2003; Gilson et al. 2005; McCabe and Sambrook 2014; Topp and Chipukuma 2015). Drawing on Hall et al. (2001) we define trust as *"the optimistic acceptance of a vulnerable situation in which the trustor believes the trustee will care for the trustor's interest"* (Hall et al. 2001). Trust can be built

by personal behaviours and organizational practices that provide space for engagement and open dialogue (Gilson 2006). Factors that have been found to influence workplace trust in public sector organizations are organizational support and decision making practices, communication, feedback mechanisms, competence, performance appraisal and reward systems and job security (Albrecht and Travaglione 2003; Nyhan 2000). Hall et al. (2001) present fidelity, competence, honesty, confidentiality and "global trust" (component of trust that is irreducible or not subject to dissection) as dimensions of trust. A recent literature review found four aspects that build and break trust in health sector encounters: sensitive use of discretionary power, perceived empathy, quality of medical care and workplace collegiality (Østergaard 2015). Okello and Gilson, in a recent systematic review that included studies with CHWs, concluded that workplace relationships and trust influence intrinsic motivation of health workers and thereby health worker performance (Okello and Gilson 2015).

CHWs' intermediary position requires them to have trusting relationships with both their communities and actors in the health sector (ERT1 2012; ERT2 2012; Mishra 2014). Elements of CHW programme design such as support, accountability and communication structures can influence relationships. When those structures do not function optimally, CHWs can face significant challenges in building trusting relationships with community members and actors in the health sector, leading to demotivation (Kok et al. 2015b; Kok et al. 2015c) and tensions as a result of trying to accommodate conflicting interests and expectations (Give et al. 2015; Kok et al. 2015b; Kok et al. 2015c; Maes and Kalofonos 2013). Similarly, when contextual issues such as gender norms are ignored, relationships may be undermined as well (Viswanathan et al. 2012).

Despite this evidence on factors influencing relationships, exact mechanisms that result in trusting relationships remain understudied. This study aims to fill this gap by applying a realist "lens". Trusting relationships are taken as the "outcome", which are the result of a "mechanism" taking place in a certain "context". Figure 8.1 shows the initial theory and assumptions underpinning these links which were refined during the study. We present a qualitative comparative study, aimed at understanding similarities and differences in how relationships between CHWs, communities and the health sector were shaped in different settings. Apart from contributing to the body of knowledge on factors influencing CHW performance, this analysis contributes to global and national efforts with regard to optimizing CHW programmes and achieving universal health coverage.

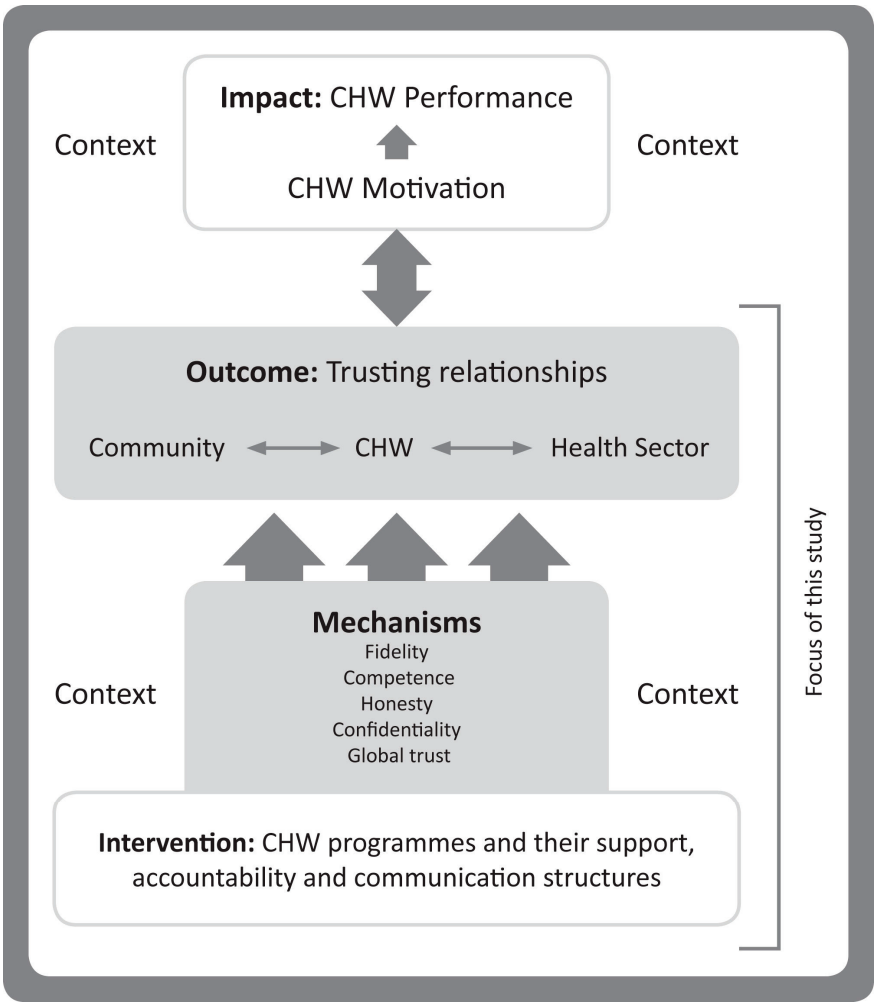


Figure 8.1 Initial theory on trusting relationships and CHW motivation and performance, including the focus of this study

8.2 The four country contexts

This study draws on research on CHW programmes in Ethiopia, Kenya, Malawi and Mozambique (Mireku et al. 2014; Nyirenda et al. 2014; Sidat et al. 2014; Zerihun et al. 2014). We purposefully included four Sub-Saharan African countries with well-established CHW programmes, but with variations in the typology of CHWs and extent of their integration into the health system (Table 8.1). As context is critical in shaping CHWs' relationships with both communities and the health sector, we present an overview featuring the CHW programme of each country.

Table 8.1 Overview of CHW programmes in Ethiopia, Kenya, Malawi and Mozambique

Programme features	Ethiopia	Kenya	Malawi	Mozambique
Programme start	2004	2006	1992	1978, revitalized since 2010
Number of CHWs	38,000	18,038	9,443	3,041
Name of CHW	HEW	CHW	HSA	APE
Focus	General health, focus on maternal, neonatal and child health Promotive, preventive, basic curative	Disease prevention and control, family health services and hygiene and environmental sanitation Promotive, preventive	Community, family, environmental health, prevention and control of communicable diseases Promotive, preventive, curative	Child health, diagnose and treatment of malaria, diarrhoea, chest infections Promotive, preventive, curative
Catchment population per CHW	2,500	100	1,000	5,000
Gender CHW	Female (exception: male in pastoralist areas)	Female and male	Female and male	Female and male (71% male)
Selection criteria	Secondary school Living in area of service	Respected Literate Role model Willingness to volunteer	Primary school, now changing to secondary school	> 18 years Respected Literate (basic literacy and numeracy test)
Selected by	District health office, *kebele* administrator and sometimes community committee	Community	Central government	Community with support of district health directorate
Supervised by	Health centre staff and district health office	CHEWs	Senior HSAs and (assistant) environmental health officers	Health facility staff and district health directorate
Linked to community structure	HDA	CHCs	VHCs	CHCs
Initial training	1 year	10 days	12 weeks	4 months
Salary	Yes	No, but sometimes (performance-based) monetary incentives related to a programme or community level income generating activities	Yes	Yes, described as subsidy and currently depending upon donor support

Ethiopia

Ethiopia has a three tier decentralized health system with health posts at *kebele* level (the smallest administrative unit), health centres and primary hospitals at district level. In 2004, the government introduced the Health Extension Programme (HEP), a free primary health care package with four components: disease prevention and control; family health; hygiene and environmental sanitation; and health education and communication. A female cadre of salaried CHWs called health extension workers (HEWs) was introduced. HEWs are selected from the communities that they serve, are secondary school graduates and receive a one-year training in basic health service delivery. They are supposed to work for 25% of their time at health post level and 75% in the community (Admassie et al. 2009; Dynes et al. 2013; Medhanyie et al. 2012b; Teklehaimanot and Teklehaimanot 2013). As more than 80% of the Ethiopian population lives in rural areas, HEWs provide the first point of care for many people. However, geographical access to health posts is not easy everywhere and basic infrastructure and equipment in health posts is often lacking (CNHDE 2011). The HEP aims to improve access and quality of primary health care through the transfer of health knowledge and skills to households, via HEWs and community volunteers, called the health development army (HDA). "Graduation" of model families occurs after training in all components of the HEP and proven implementation at the household level (Bilal et al. 2011; Teklehaimanot and Teklehaimanot 2013). However, due to travel time between households and competing demands for family members' time for farming activities, the model family training is taking longer than anticipated (Banteyerga 2011). Some communities criticize the HEP for lacking curative services (Birhanu et al. 2013). Uptake of services delivered by HEWs is constrained by cultural beliefs and practices and low literacy (Medhanyie et al. 2012b). All HEWs are female, and it is believed that this makes services well accepted (Birhanu et al. 2013).

Kenya

Kenya's health system is devolved, with primary health services falling within the county's responsibility (KPMG 2013). In 2006, a Community Health Strategy (CHS) was launched and implementation took place with varying degrees of success in government-run primary health services as well as through vertical programmes run by non-governmental organizations (NGOs). Under the CHS, there are two government employed facility-based community health extension workers (CHEWs) supervising 50 voluntary CHWs for every community unit of about 5,000 people. CHWs carry out promotive, preventive and some curative tasks in disease prevention and control, family health and hygiene and environmental sanitation. In addition, there are ten community health committee (CHC) members per unit. CHWs are selected by the community and receive a training of several weeks (MoH 2007; RoK 2006). Kenya is currently in the process of revising its CHS. There

will be more CHEWs who will carry out promotive, preventive and curative tasks, supported by fewer CHWs who will act as mobilisers, ensuring the linkage between community and CHEWs (DCHS 2013). CHEWs, certificate holders in public health and community nursing, are supposed to train CHWs. CHWs report to and are supervised by CHEWs and the CHC, who are both linked to health facility committees (HFCs). The CHS faces challenges of limited supplies and stock-outs (MOPHS 2010). CHWs are male and female, male CHWs have been reported to drop-out more as a result of the voluntary nature of the job and the societal norm of men being more responsible for family income (Olang'o et al. 2010). In urban areas, CHWs (both female and male) are sometimes constrained in client follow-up because of migration and security issues (Mireku et al. 2014).

Malawi

Malawi has a partly decentralized health system. There is a government paid cadre of health surveillance assistants (HSAs), comprising 30% of the health workforce (Smith et al. 2014). HSAs are recruited by the central government, must have secondary school level education and receive 12 weeks training (Nsona et al. 2012; Nyirenda et al. 2014). Once employed, they are supposed to reside in their catchment area, working mainly in health promotion and prevention for a population of about 1,000 (Gilroy et al. 2012). From 2008, HSAs' curative tasks have been expanded. HSAs working in hard-to-reach areas conduct integrated community case management (iCCM) of childhood illnesses (Callaghan-Koru et al. 2013; Fullerton et al. 2011; Nsona et al. 2012). HSAs are supervised by senior HSAs or environmental health officers (Callaghan-Koru et al. 2013). They are attached to a hospital or health centre, but supposed to spend most of their time in the community. HSAs are supported by village health committees (VHCs), consisting of ten unpaid village representatives elected by the community, and other volunteers, such as members from HIV support groups (Kok and Muula 2013; Nyirenda et al. 2014). Major constraints to the HSA programme have been identified as lack of coordination and inadequate resources for supplies (Nyirenda et al. 2014). One study highlighted that community members, including traditional leaders, expected hand-outs and allowances whenever they were called on to participate in activities carried out by HSAs, which hindered programme performance (Nyirenda and Flikke 2013). HSAs are male and female. Although general acceptance of HSAs is high in communities (Kok and Muula 2013), socio-cultural challenges sometimes interfere with HSAs' work. For instance, a woman revealing that she is pregnant — for purposes of follow-up by HSAs — is considered a taboo in some communities (Munthali and Mvula 2009). However, no research has been conducted to find out whether this taboo was hindering the work of male HSAs more than that of female HSAs.

Mozambique

Mozambique gained independence in 1975 and adopted a health system that emphasized primary health care through state-managed health care facilities (Pfeiffer 2003). Within this system, the agentes polivalentes elementare (APE) National Programme was established in 1978. Volunteers selected by communities were trained as APEs and deployed in their communities of origin. However, the civil war (1976-1992) severely hampered the APE programme (Garenne, Coninx, and Dupuy 1997). The APE programme also faced challenges regarding supervision and support, which resulted in the interruption of programme implementation in the mid-1990s (Succato et al. 1994). During this period, different CHWs appeared with diverse designations and training curricula, mainly implemented by NGOs. This resulted in a rapid increase of CHWs with wide variations in their scope of work on "vertical programmes", and this led to duplications of activities and conflicting interventions (MoH 2010c). In response, the Ministry of Health signed codes of conduct with donor agencies and NGOs (MoH 2000, 2005). From 2010, coordinated efforts were put in place to revitalize the APE programme. APEs are trained for four months and 80% of their time should be spend on promotion and 20% on curative tasks (MoH 2010a). They serve a population between 500 and 2,000 (MoH 2010c). They are given a subsidy defined by the government, but payment is dependent on donor funding. APEs are supervised by staff from health facilities and the District Health Directorate. APEs are required to perform regular home visits to community members, instead of being stationary in health posts and are forbidden to charge fees for services (MoH 2010b). Although the policy holds priority for communities to select female volunteers, the majority of APEs is male. Large distances and irregularities in supervision represent important barriers for APEs to perform adequately (Ndima et al. 2015).

8.3 Methodology

This study aimed to get an indication of "what works, in which conditions, for whom" (Pawson 2006), as input into the development of quality improvement interventions within the CHW programmes of four countries. In addition, the study aimed to specify the initial theory (Figure 8.1). A realist lens was chosen, as realist approaches test theories on complex interventions and stress the importance of interactions and context. The success of an intervention depends on the individuals, interpersonal relationships, institutions and infrastructures through which and in which the intervention is delivered (Marchal et al. 2012). When applying a realist approach, a picture is built up on how various combinations of contexts influence the outcomes of an intervention. The "how" is represented by identified mechanisms, which are the recourses that interventions offer to enable their subjects to make them work, more specifically the process of how relevant actors interpret and act upon the intervention stratagem (Pawson and Tilley 1997). Where

possible, outcomes (in this case relationships), their underlying generative mechanisms (M) and the context (C) in which these mechanisms led to the outcomes (O), named CMO configurations, were identified (Pawson et al. 2004). Figure 8.2 contains an overview of the research and methodology deployed: from defining an initial theory, to four country case studies, to the inter-country analysis, to refining the theory and inputting into the development of quality improvement interventions.

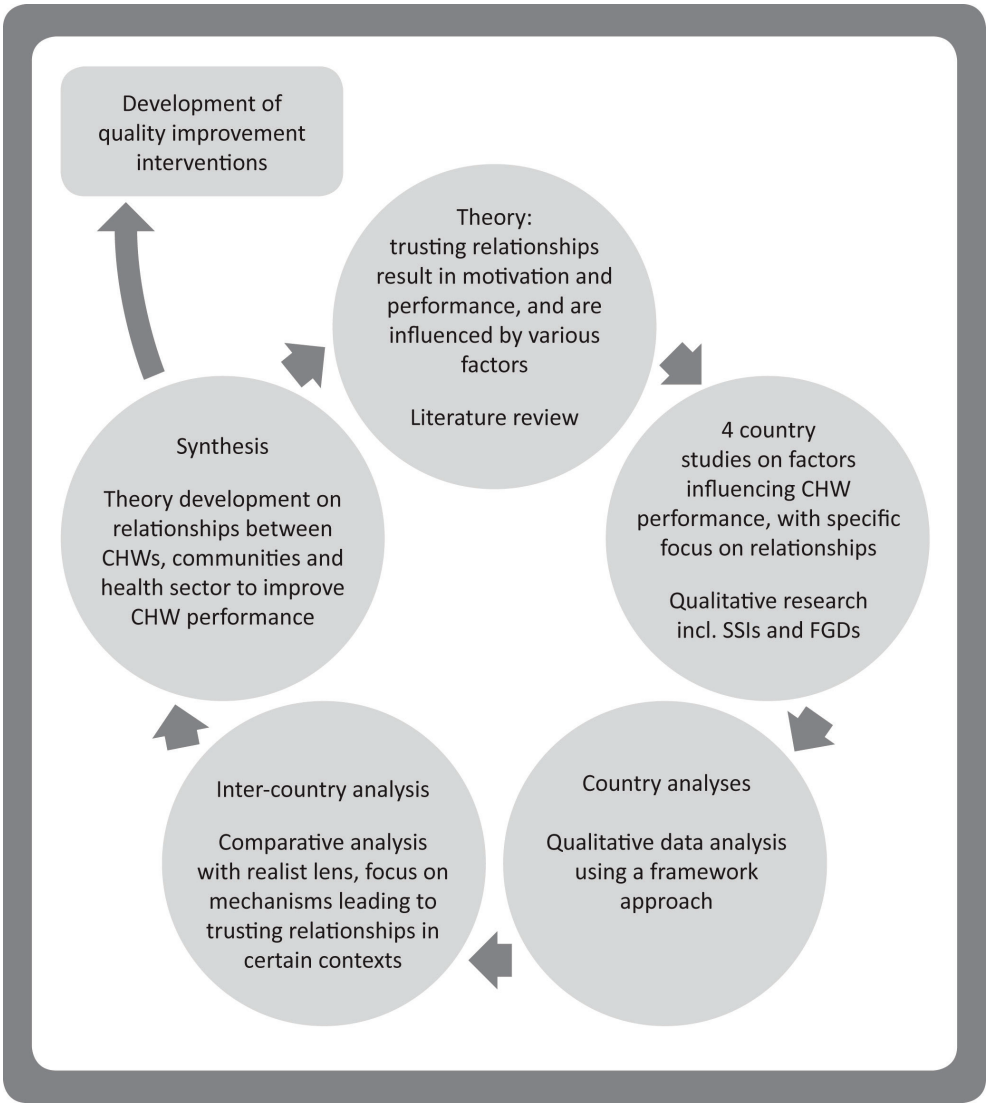


Figure 8.2 Overview of the research and used methodology

Country studies

We used a conceptual framework on factors influencing performance of CHWs as the basis for our wider enquiry (Kok et al. 2014; Kok et al. 2015a). All country studies used this framework to develop topic guides for focus group discussions (FGDs) and semi-structured interviews (SSIs) with purposefully sampled CHWs, their supervisors and managers and various community members (Table 8.2). All studies focused on perspectives of participants on factors influencing CHW performance, and specifically factors influencing relationships between CHWs and actors in communities and the health sector. Participants also gave their perspectives on the strength of those relationships.

Table 8.2 Overview of FGDs and SSIs conducted per country

	Ethiopia	Kenya	Malawi	Mozambique
CHWs				
FGDs	HEWs - 6	CHWs - 6	HSAs - 3	
SSIs	HEWs - 12		HSAs - 8	APEs - 18
CHW supervisors, managers				
SSIs	*Kebele* administrators - 3 Health centre in charges - 3 Delivery case team leaders - 3 HEP coordinators - 3 Regional HEP coordinator - 1 Zonal HEP coordinator - 1	CHEWs - 16 Sub-county health management team members - 3 Facility in-charges - 4 National level policy makers - 4	District level staff - 13 Health centre in charges - 2 NGO staff - 9	Health facility supervisors - 3 District supervisors - 2
Community members				
FGDs	Women - 6 Men - 2	Community members - 4	Women - 7 Volunteers - 6	Mothers - 8
SSIs	Mothers - 12 TBAs - 6	Community members - 10	Mothers - 1 TBAs - 6 Traditional leaders - 3 Volunteers - 2	Community leaders - 6

Country specific topic guides were translated into the local languages and back-translated for consistency. They were all piloted and adjustments were made as needed. Data collection was conducted by trained research teams with experience in data collection within the local context. Data was collected in a number of districts per country (six in Ethiopia, two in Kenya, Malawi and Mozambique). Daily debriefing sessions with data collectors were held to discuss key findings, refine lines of enquiry and summarize observations. FGDs and interviews were digitally recorded, transcribed and, where needed, translated into English or Portuguese (Mozambique). A sample of transcripts was randomly checked against recordings. Transcripts were independently read in pairs by a

group of researchers to identify key themes and develop a coding framework. The coding framework was based on our initial common framework on CHW performance and new themes were added where needed, following the country data (Dixon-Woods 2011). Transcripts were coded using Nvivo (v.10) software. The coded transcripts were further analysed and summarized in narratives for each theme. Study findings were validated with policy makers and programme implementers in all counties.

Inter-country analysis

We conducted a qualitative comparative analysis of the four country case studies (Yin 2013). We developed a robust process to conduct this analysis, building on common methods and protocol. During the analysis process in the respective countries, we had joint meetings with researchers from the four countries and researchers from the United Kingdom and Netherlands involved in designing the research. We also had joint meetings where researchers from all four countries were represented. This brought in different perspectives to the analysis within and between countries. Exchange visits to see implementation of CHW programmes in Ethiopia and Mozambique enabled researchers from all four contexts to discuss issues of similarity and difference and their implications. Country matrices containing detailed information on all factors related to relationships between CHWs, communities and the health sector were developed. This process included inductive thematic analysis and open coding (Ritchie and Spencer 2002). Main themes were identified and narratives were written on the identified CMO configurations.

Ethical approval

The generic study protocol was approved by the Royal Tropical Institute Ethical Review Committee in the Netherlands. Country specific research protocols were approved by the South Nation Nationalities and Peoples Region Health Bureau Research and Technology Transfer Core Process of South Ethiopia in Ethiopia; the Kenya Medical Research Institute Ethics and Review Committee in Kenya; the National Health Sciences Research Committee in Malawi; and the Institutional Review Joint-Board of the Faculty of Medicine of the University Eduardo Mondlane and Maputo Central Hospital in Mozambique.

8.4 Results

Various CMO configurations were identified. First, we focus on mechanisms and contexts that influenced (either positively or negatively) CHWs' relationships with their communities. Then mechanisms and contexts that influenced CHWs' relationships with actors in the health sector are presented.

Relationships between CHWs and communities

CHWs' relationships with their communities were shaped by a variety of factors related to broader and programme context. Specific contexts and related mechanisms that resulted in strong or weak relationships between CHWs and their communities were identified. These CMO configurations were categorized according to main themes within the programme context that emerged in the four countries: the way in which CHWs were recruited and selected; the extent to which the community was supportive of the programme; the tasks that CHWs were performing or supposed to perform; and resources (Table 8.3).

Recruitment and selection

In Ethiopia, Kenya and Mozambique, respondents reported that the way in which CHWs were recruited and selected eased establishment of trusting relationships between CHWs and communities. In these countries, the policy assured that CHWs served in their areas of origin. In Kenya and Mozambique, CHWs were selected with involvement of health sector representatives *and* community members.

> *"They* [the community] *are satisfied with the quality of the CHWs, because when we were recruiting the CHWs we did it in a baraza[11]. And we had all the community members in the baraza, and they are the ones who chose the people to work with them."* (Kenya, interview, CHEW)

From the perspective of the community, attributes such as humility, respect, responsibility, love for neighbours, dedication, and listening to the community emerged as central criteria for eligibility in Kenya and Mozambique. These important attributes were felt to be satisfied, because the CHWs served in their community of origin and were selected by that community.

> *"I think an APE should be a humble person, should not be a proud person, because when he is proud he doesn't know how to respect the community and will not listen to the community... When the flu goes up while it is night, I must go to see the sick people, that is why I have a flashlight so as not to say 'until tomorrow because I've left now'... Someone who is proud can say 'I do not work at night.'"* (Mozambique, interview, APE)

[11] Community meeting organized by the local administrative officer: chief or sub-chief.

Table 8.3 Factors influencing CHWs' relationships with their communities

Broader context *"In a context where..."*	**Programme context** *"and…,"*	**Mechanism**	**Outcome** *",leading to…"*
Recruitment and selection			
Community participation is promoted by the government	CHWs are recruited from their area of origin and/or selected with involvement of the community, and thus share the same socio-cultural attributes as their clients	Communities and CHWs feel connected to and familiar with each other and communities feel that the CHWs serve in their interest	+
Men and women have clearly separated gender roles and responsibilities in (reproductive) health care	Female CHWs are recruited	Women in the community and CHWs feel free to discuss reproductive health issues with each other	+
HIV is stigmatized	CHW are recruited from their area of origin, live in their area of service and provide HIV services	Communities fear lack of confidentiality of CHWs	-
Community support			
There is a history and value of volunteerism	Volunteering is an official element of the CHW programme	CHWs and volunteers feel connected and that they serve the same goals through their teamwork	+
There is a history and value of traditional leadership	Traditional leaders are involved in the CHW programme	Communities have more respect for and credibility towards CHWs	+
People live in poverty	Incentives for volunteers are paid irregularly and differ between programmes	Volunteers are jealous and see CHWs as dishonest	-
CHW tasks			
Human resources for health are constrained	Curative tasks have been shifted to CHWs and supplies to conduct the expanded tasks are available	Communities have enhanced respect for and recognition of CHWs and CHWs have increased feelings of self-fulfilment	+
	Curative tasks have been shifted to CHWs and supplies to conduct the expanded tasks are lacking and/or roles and responsibilities of CHWs are unclear to communities	CHWs feel stressed because of being unable to fulfil communities' expectations and communities feel disappointed and/or confused	-
Multiple vertical development programmes exist next to each other	Various types of CHWs with different tasks work in the same communities	Communities feel disappointed and/or confused	-
Health managers lead from a political perspective	CHW supervisors are involved in local politics, expecting CHWs to play a role in politics as well	Communities see CHWs as dishonest and not serving in their interest	-
Resources			
Resources are constrained	CHWs lack supplies to conduct their tasks	Communities feel disappointed and/or doubt about CHWs' competence and/or see CHWs as dishonest	-

+ means trusting relationships between CHWs and their communities; - means weak relationships between CHWs and their communities.

Respondents reported that as a result, communities and CHWs felt connected with each other, and that communities thought that the CHWs serve in their interest, which enhanced trust from the community towards the CHW. Thus, the following CMO configuration was developed (row 1 of Table 8.3):

"In a context where community participation is promoted by the government and CHWs are recruited from their area of origin and/or selected with involvement of the community, and thus share the same socio-cultural attributes as their clients, communities and CHWs feel connected to and familiar with each other and communities feel that the CHWs serve in their interest, leading to trusting relationships between CHWs and their communities".

In Ethiopia, community members reported that HEWs being female was important to them, as they prefer to discuss reproductive health issues amongst women. In this case, the government's recruitment policy reflected gender norms in society. In Kenya, CHWs were more often female than male. Managers and CHEWs reported that this was because of the voluntary nature of the job. One CHEW stated that male CHWs sometimes had problems communicating about reproductive health issues with young females in the community. Despite this, a manager advocated to involve more male CHWs, in order to involve more men in community health.

CHWs felt they had a privileged social intermediary position in their communities, particularly in Mozambique and Ethiopia. This constituted an important factor in fostering trusting relationships with their communities, as CHWs felt connected and answerable to them. APEs in Mozambique acknowledged existence of community habits and customs that may be hazardous to health, but did not consider them a hindrance to their work, because they shared the same social and cultural context and found ways to address them taking into account this context. However, the embedment of CHWs in their communities sometimes raised concerns for community members about how they will be treated and judged and whether their confidentiality would be maintained. This was reported by some community members regarding the role of CHWs in HIV programmes in Kenya and Mozambique.

In Malawi, unlike the other three contexts, HSAs were not selected by the community and in many cases did not live and work in their area of origin. However, it was found that HSAs who did not come from the area of service, but who lived there or spent the majority of their time in the community, were more respected and had better relationships with the community compared to HSAs who lived elsewhere and spent a lot of time in facilities.

Community support

Community support to CHWs varied in extent and form in all countries. Support came from community members (of which some were volunteers), traditional leaders, traditional birth attendants (TBAs), schools, women groups or churches and mostly involved assisting CHWs in conducting promotional and preventive tasks. This support was sometimes reported to foster trusting relationships, as teamwork triggered a sense of collaboration and working on the same goals. Community structures that facilitated support were health development armies (HDAs) in Ethiopia, CHCs in Kenya and Mozambique and VHCs in Malawi. Although these structures are all part of the national policies, at the time of conducting this research, only the HDAs in Ethiopia were strengthened as an explicit choice of the government to enhance community participation and facilitate the work of HEWs.

> *"We used to go home-to-home, but it was difficult for us to cover the whole community. We didn't have enough time to counsel a family and get them convinced. After the introduction of one-to-five networking* [part of the HDA]*, this problem got solved."* (Ethiopia, interview, HEW)

In Malawi, VHCs were not always active and if they were, support was more *ad hoc*, for example, members became active when campaigns were conducted. Various respondents pointed to mistrust between volunteers and HSAs when it comes to (financial) incentives and lack of incentives resulted in volunteer attrition.

> *"… After they* [the volunteers] *were trained and started implementing their activities there are no refresher trainings … as a result most groups died a natural death. If maybe there were twenty people you find that only five people are working and the rest dropped out because there is nothing to motivate them."* (Malawi, interview, senior HSA)

Volunteers were sometimes jealous of other volunteers and HSAs because they thought they received more incentives. Some volunteers thought HSAs were dishonest, keeping incentives for themselves instead of distributing them to volunteers.

Despite mistrust between HSAs and volunteers in some areas, other HSAs reported that volunteers helped them with tempering expectations of the communities, for example in the case of drug stock-outs. In Mozambique, this went further: some communities reported giving their APE money for transportation to the health facility to pick up drugs, knowing the APE could not fund the transport, because of delays in the receipt of subsidies. Thus, the community filled a gap in the health system. This can be seen as a result of the trusting relationships between APEs and their communities.

> *"...We saw that as there is a delay in their salary of three months, this subsidy comes when they no longer have anything. Sometimes the population takes effort to fetch the medicine; the transport needs money. She is also a peasant. It is the people who saw the suffering. She didn't say anything or complain."* (Mozambique, interview, community leader)

In all countries and from various types of respondents, the involvement of traditional leaders was said to foster CHWs' relationships with the community, through enhanced community respect and credibility towards CHWs.

Community engagement in monitoring CHWs was reported in Ethiopia, Kenya and Mozambique, and to a more limited extent in Malawi. In all countries, community accountability structures in the form of health facility committees (HFCs) were available, but a specific community structure aligned with the CHW programme was only found in Kenya in the form of the CHC.

> *"...The CHC also has to report to the CHEW on our progress, and when we have the baraza the community is asked if indeed we visit them."* (Kenya, FGD, CHWs)

However, in most areas included in the Kenyan study, community involvement in monitoring and feedback was not strong. CHC meetings were reported to be held infrequently and were dependent on donor support. In some areas, CHCs were no longer functional or never received training and were thus not aware of their role and not empowered to provide feedback. The role of the CHC in monitoring CHW performance was reported to be stronger in rural than urban areas.

In Mozambique, it was also not clear whether the community felt empowered to give APEs feedback. APEs reported that they did not receive complaints from the community; they just got requests to provide more services. This led them to assume that the quality of the care they provided was considered good.

Our analysis process across the four country contexts was not able to relate weak community accountability structures to constrained relationships between CHWs and communities.

CHW tasks

The expansion of CHWs' curative tasks increased community respect for and recognition of CHWs and led to higher levels of self-fulfilment of CHWs, which fostered relationship between CHWs and their communities. Relationships were sometimes constrained by expectations from the side of the community that could not be met by the CHWs. In all countries, especially in Mozambique, communities expected more curative services from CHWs than that they were able or allowed to deliver. This led CHWs to feel stressed and in

certain cases in Malawi, in CHWs' reluctance to stay in the community, due to criticism or inability to fulfil community expectations.

In Kenya and Malawi, different tasks that CHWs conducted for vertical programmes sometimes led to confusion at community level and expectations of communities that could not be met by CHWs, leading to constrained relationships. In Ethiopia, some HEWs reported that competing programmes and expectations from the senior cadres led to changes in their planned activities, leading to mistrust from communities.

> *"… The communication between the kebele administrator and this health centre is weak, because they are using HEWs for other purposes, they use them for agriculture, for political purpose. If we would work together with the kebele administrator we could identify the gap that the HEW has and help her improve..."* (Ethiopia, interview, health centre head)

Resources

CHWs in all four countries had to deal with insufficient supplies and logistics. This led to difficulties in daily performance of tasks, but also in community relationships. In Kenya, CHEWs reported that a sense of mistrust was created by the belief held by some community members that the CHWs were withholding what should rightfully belong to the community. The community had been informed about what the CHWs would provide, but since the CHWs had not been provided with kits, they were unable to fulfil all the roles the community expected.

> *"We had a baraza before the community strategy, and we told them all those things that the CHWs will be doing for them, but due to lack of equipment and finance, they see the CHWs not doing all that they should be doing. So they keep asking: 'When will you start treating us?' That tells you that they expect more from the CHWs.*" (Kenya, interview, CHEW)

In Ethiopia, HEWs who lacked supplies or equipment to conduct reproductive health tasks were sometimes seen as incompetent by people in the community.

Relationships between CHWs and the health sector

CHWs' relationships with actors in the health sector were shaped by a variety of factors, again related to the broader and programme context. CMO configurations were categorized according to main themes within the programme context that emerged: whether CHWs were backed by professional support; the nature and functionality of CHW supervision; the way incentives, including training, were organized and played out; and issues related to health facilities (Table 8.4).

Table 8.4 Factors influencing CHWs' relationships with the health sector

Broader context *"In a context where..."*	**Programme context** *"and...,"*	**Mechanism**	**Outcome** *",leading to..."*
Professional support			
Human resources for health are constrained	Tasks have been shifted to CHWs and programmes have clear professional support structures for CHWs	CHWs and health professional feel connected and that they serve the same goals through their teamwork	+
	Tasks have been shifted to CHWs, but the roles and responsibilities of CHWs are unclear to health professionals and/or clear professional support structures for CHWs are lacking	CHWs feel disrespected by health professionals and health professionals doubt about CHWs' competence	-
Supervision			
Resources are constrained	Supervision is conducted irregularly with an emphasis on records and/or supervisors lack training and/or supervisors have competing priorities due to high workloads	CHWs feel not supported by their supervisors	-
Resources are not constrained	Supervision is conducted through accompanied households visits	CHWs feel supported by their supervisors	+
There are large socio-economic differences between groups in the population	The socio-economic distance between CHWs and supervisors is large, as they come from different backgrounds	CHWs feel disconnected from and not familiar with their supervisors	-
There is a socio-cultural norm of respect towards elderly	Younger supervisors supervise older CHWs	CHWs disrespect their supervisors	-
Incentives, including training			
Multiple vertical development programmes exist next to each other and people live in poverty	Various types of CHWs with different tasks and differences in incentives work in the same communities and/or there is donor dependency regarding incentives and/or training attendance is related to financial incentives, but criteria for selection of training attendance are unclear	CHWs feel treated unfair and see the upper level as dishonest	-
CHWs' connection with health facilities			
Resources are constrained	Referral systems lack effective reporting procedures and feedback loops	There is hindered communication between CHWs and health workers at health facilities	-
	Facility health services and related transport systems are not of optimal quality or available	CHWs have no confidence in the referral services	-

+ means trusting relationships between CHWs and actors in the health sector; - means weak relationships between CHWs and actors in the health sector.

Professional support

CHW programmes in all four countries had formalized support systems, including supervision and training (see below). In Ethiopia, Kenya and Mozambique, CHWs received practical support from health professionals, which was important to enhance their competencies and made them feel part of a team working on the same goals, which fostered relationships. The same was reported in Malawi, although some HSAs reported disrespect and accusations of incompetence from other health workers as a result of the lack of clarity regarding CHW roles. This led to lack of trust of HSAs towards the "upper level", demotivation and less recognition of CHWs by communities. In this case, weak relationships between CHWs and actors in the health sector led to weak relationships between CHWs and their communities, because unsupported CHWs were less recognized by the community. The "knock-on effects" of relationships between CHWs and actors in the health sector on relationships between CHWs and their communities are presented in Table 8.5.

Supervision

In all countries, supervision was found to be irregular, fault-finding in nature, with an overemphasis on checking of records and a lack of supportive and problem-solving approaches and feedback. On the whole, CHWs felt unsupported by the upper level, which constrained relationships.

> "*If you have done well, they should tell you that you have done well and if you did not do well they should also tell you that you did not do well. That is motivating, and not that they should just be telling you about areas which you have not done well, that is not good."* (Malawi, FGD, HSAs)

Only in Kenya, CHEWs reported to conduct supervision through monthly meetings and joining CHWs while carrying out household visits, which did include problem solving.

> *"I go visit the households with them. Sometimes I just call a CHW, and I tell them I just want to visit, then we go visit those people in those households, to see if they are satisfied with the services the CHWs are providing, to see if they are satisfied with the way they are treated at the facility level. That is how I supervise them.*" (Kenya, interview, CHEW)

One CHEW described using supervision as a time to act as an arbitrator between the community and the CHW if there is a poor relationship between them.

CHWs in Ethiopia and Kenya indicated that supervision contributed to their credibility: they thought that the community liked to see them being supervised. In Malawi and Mozambique, this was confirmed by community members saying that visible support from

supervisors towards CHWs and good relationships between them were important for quality assurance (Table 8.5). In Ethiopia, HEW supervisors lacked knowledge on the HEP and therefore had problems in building capacity of HEWs. In Kenya, supervisors were reported to have high workloads and insufficient training and knowledge on guidelines. The double role as facility-based staff and supervisor of CHWs at community level was hindering relationship building between supervisors and CHWs in Kenya and Mozambique.

> *"…CHEWs find a lot of challenges because they are now torn into two. They attend to the community and to the facility as well."* (Kenya, interview, CHEW)

In Kenya, relationships between CHWs and supervisors were sometimes problematic: in some cases, older CHWs were reported to refuse to listen to feedback from younger CHEWs. HSAs in Malawi wished to be supervised more frequently and pledged for supervisors to better understand the circumstances in which they operated. Some HSAs were mistrusting their supervisors, feeling disconnected because of the different worlds supervisors and HSAs came from, lived in, and had to cope with.

In all countries, data reporting systems were available and CHWs reported to upper levels through the use of standardized data collection tools. However, regular performance appraisals based on checklists to measure performance was not conducted. The reporting system seemed more geared towards upward accountability (to senior management) than downward accountability (back to the CHWs and communities).

> *"The boss comes back, reviews the book and begins to write, but I do not know what he is writing, and then he doesn't tell me anything."* (Mozambique, interview, APE)

Kenya was the only country were in some areas, data came back to the CHWs and community, during dialogue days. However, generally the systems lacked a proper feedback loop from central to more distal levels and to CHWs, leading to demotivation of CHWs.

Incentives and training

Remuneration of CHWs differed across countries, with government salaries for CHWs in Ethiopia and Malawi and more irregular stipends or subsidies for CHWs in Kenya and Mozambique.

In Mozambique, APEs expressed their discontentment regarding the substantially delayed arrival of promised subsidies and other incentives. The issue of subsidy payment backlog was also mentioned by health managers as a difficulty which can lead to APEs providing a low quality of service or dropping out, and hindering relationships between supervisors

and APEs. Sometimes, supervisors were not comfortable asking CHWs about performance, knowing that APEs are receiving delayed subsidies and as a result are demotivated.

> *"We have had trouble — I and the APEs — regarding the allowances that take too long for them... I stimulate them to continue a little longer, but the subsidy does not enter at the scheduled date… I must go to them and say that the subsidies for August fall in mid-September. But then no subsidy came out, and when it came, it was for two months, while you have six months of debt. It would be great if we could overcome this difficulty, not only for them but also for me as a supervisor."* (Mozambique, interview, manager)

Refresher training could establish working relationships between CHWs and other health workers and enhance respect from other health workers towards CHWs because of upgraded knowledge. However, in Ethiopia, official trainings for upgrading were a source of disappointment for many HEWs. The selection process was not clear, the entrance exams considered too difficult and promotion after attending the training was not guaranteed. Within the refresher trainings, health facility staff was not willing to let HEWs practice on conducting deliveries. In Malawi and Kenya, there was no refresher training for CHWs, although NGOs invited CHWs for specific trainings related to vertical programmes. In Malawi, NGO-led trainings generally were a source of mistrust, demotivation and dissatisfaction, because of perceived favouritism in selection of training participants, leading to jealously between HSAs and feelings of unfairness, as trainings were related to extra financial incentives. In some cases, this led to deliberate underperformance, where HSAs refused to conduct certain tasks when they had not been invited to trainings related to those tasks.

> *"It's not like the other HSA doesn't have the right information on the job, but because his colleague HSA went for training and signed for it* [got paid]*; it is very hard for the other person who did not sign for it to work willingly."* (Malawi, FGD, HSAs)

In general, financial incentives were a source of mistrust between volunteers, HSAs and their supervisors and managers at the district level.

CHWs' connection with health facilities

Referral systems lacking effective reporting procedures, including feedback systems, resulted in hindered communication between CHWs and health facility staff in all four countries. In Kenya though, some CHWs reported to receive feedback after referral, which motivated them in their work.

In Ethiopia, Kenya and Malawi, unreliable quality and costs at health centre or hospital level sometimes resulted in a lack of trust and constrained relationships between CHWs

and other health workers and between clients and CHWs. As CHWs have a position in between health facilities and communities, they were sometimes held responsible by community members for problems related to the facility level. Again, relationships of CHWs with the upper level had a direct influence on CHWs' relationships with communities (Table 8.5). In Kenya and Mozambique, clients expected transport or a preferential treatment when referred by a CHW, which was not always fulfilled. When it was fulfilled, this led to satisfaction of the clients and motivation of CHWs.

Table 8.5 The influence of workplace trust on relationships between CHWs and communities

Broader context *"In a context where..."*	**Programme context** *"and…,"*	**Mechanism 1 (CHWs – actors in health sector)**	**Mechanism 2 (CHWs – communities)** *"and…,"*	**Outcome** *"leading to…"*
Human resources for health are constrained	Tasks have been shifted to CHWs, but the roles and responsibilities of CHWs are unclear to health professionals and/or clear professional support structures for CHWs are lacking	CHWs feel disrespected by health professionals and health professionals doubt about CHWs' competence	CHWs receive lower recognition by the community and feel less valued	-
Resources are not constrained	Regular and visible supervision is conducted through accompanied households visits	CHWs feel supported by their supervisors	Communities have more respect for and credibility towards CHWs	+
Resources are constrained	Facility health services and related transport systems are not of optimal quality or available	CHWs have no confidence in the referral services	Communities have no confidence in the referral services and in CHWs as they link communities towards these referral services	-

+ means trusting relationships between CHWs and actors in the health sector, and thereby trusting relationships between CHWs and communities; - means weak relationships between CHWs and actors in the health sector, and thereby weak relationships between CHWs and communities.

8.5 Discussion

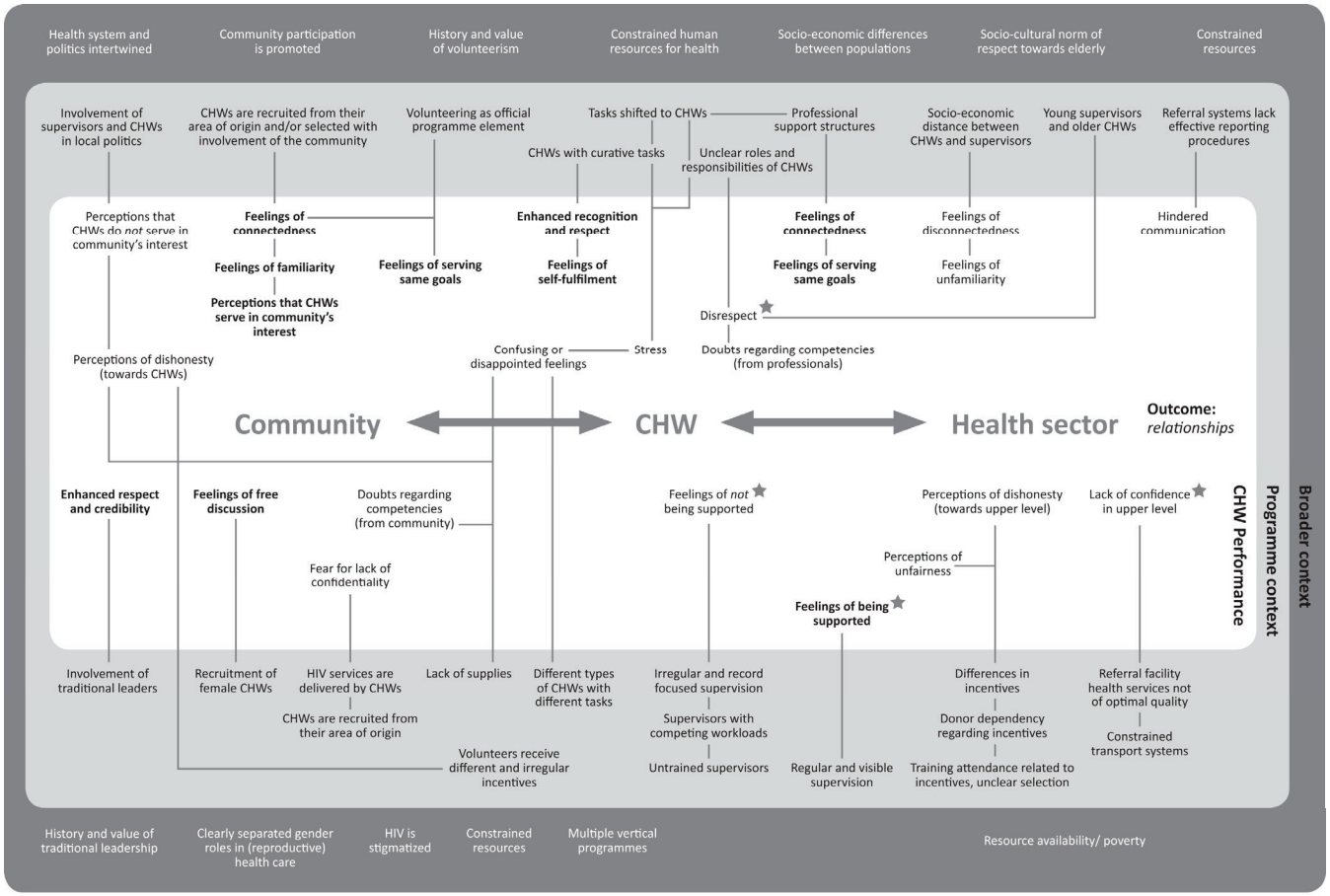
This study reaffirms the importance of trusting relationships for CHWs, positioned as intermediaries between communities and the health sector, as a determinant of performance. The findings demonstrate the complex interplay of influences on CHWs' relationships with their communities and actors in the health sector. Certain programme elements could trigger a change in the behaviour and experiences of any of the actors involved (CHW, community or health sector), resulting in either constrained or trusting relationships.

Figure 8.3 shows a summary of the contextual factors and mechanisms influencing relationships between CHWs, communities and the health sector. Our analysis reveals that the circumstances seem more conducive to producing enablers of trusting relationships

between CHWs and communities, and relatively more barriers to relationships between CHWs and the health sector. In addition, in certain cases the strength of relationships between CHWs and their supervisors or managers had a knock-on effect on the strength of CHWs' relationships with their communities. The influence of workplace trust[12] on relationships between health workers and their clients has been identified before (Gilson 2006; Gilson et al. 2005). In our study, it was mostly a negative influence. Despite the fact that CHWs have a unique intermediary position, the converse (the impact of CHWs' relationships with their communities on relationships with actors in the health sector) was not borne out in our study. This may represent an imbalance in power and accountability: compared to that of the health sector, the voice of communities is limited, with implications for ownership and responsiveness of CHW programmes. When we see health systems as social institutions, the ways of bringing about change in health systems go beyond altering the "hardware" – finance, medical products, information systems, levels and types of human resources, forms of services delivery and governance – to recognize that systems encompass people at both the supply and demand side. The "software" – the ideas and interests, values and norms, relationships and power – is also part of the health system and critical for its performance (Sheikh et al. 2014a; Sheikh et al. 2011). Our study confirms this. For example, in Kenya and Mozambique, mobile communication between CHWs and their supervisors was hindered by lack of airtime, but CHWs did not stress this as a profound factor hindering relationships. Other factors, related to feeling supported and valued through supervision and training and receiving recognition from the community were discussed much more, indicating the importance of shared values, trust, appreciation and respect. For a health system to be truly people-centred, relationships of health sector actors with communities should be strong. CHWs play a large role in linking both sides and have the potential to improve health systems.

The study provides insight into how programmes could be furnished to trigger mechanisms that could lead to improved relationships and in turn improved CHW motivation and performance in certain settings. The CMO configurations presented in Table 8.3-8.5 can be used for this purpose by policy makers and programme managers. For example, in all countries, the set-up of the supervision system could be adjusted, with improved support and problem-solving approaches (Hill et al. 2014), to contribute to improved relationships between CHWs and supervisors, with positive implications for community relationships too. The same was found in a recent study involving auxiliary nurses in Guatemala, in which the nature of relationships that supported auxiliary nurses' performance were related to attention to psycho-social well-being, understanding of needs and responsive assistance in problem resolution between nurses and managers

[12] In Kenya and Mozambique, where CHWs are volunteers, the term "workplace trust' might be not suitable, however, official supervision and support systems are in place.



★ Means that these mechanisms also have an effect on the relationships between CHWs and their communities. Mechanisms presented bold had a positive effect on relationships.

Figure 8.3 Overview of contexts and mechanisms that influence CHWs' relationships with the community and health sector

(Hernández et al. 2014). With regard to CHW training, a more integrated package (instead of multiple vertical training programmes) (Redick, Dini, and Long 2014) that includes professionalism, confidentiality and community roles could also strengthen CHWs' relationships with both communities and the health sector. Visible support from and supervision by health professionals can increase community recognition of and trust in CHWs (Glenton et al. 2013), in addition, quality of facility services linked to CHW programmes can also positively influence trust of communities in CHWs.

The influence of context on CHW and programme performance has been assessed in other studies (Kok et al. 2015a; Palazuelos et al. 2013). Besides similarities on how programme and broader contextual factors influenced relationships across the four countries, differences also emerged. In Malawi, HSAs are recruited and selected without community involvement, and they often do not serve in their area of origin. As a result, our study found that HSAs had weaker relationships with their communities than for example CHWs and APEs in Kenya and Mozambique, which led to lower perceived performance by the community. In Malawi, HSAs are salaried workers and officially part of the health sector, which is not the case in Kenya and Mozambique. However, the HEP in Ethiopia shows that integrated and salaried CHWs could still have trusting relationships with communities, when support systems with voluntary CHWs are a strong part of the programme. The preferred gender of CHWs was female in Ethiopia, related to their tasks in reproductive health. In Kenya, the gender preferences seemed to be mixed. In Mozambique, unrealistic expectations from the community regarding curative tasks of APEs was more profound than in the other countries (Give et al. 2015). This could be a result of health facilities being less accessible: Mozambique has the largest catchment population per CHW, while the country has a challenging topography. Expansion of the "shifting" of curative tasks to CHWs necessitates improved training, supervision and incentives (Fulton et al. 2011), and thus a better integration of CHWs in the health system. This requires sustainable resources and political will, but it could also require a transition in thinking of CHW programmes from being voluntary into being more formalized in nature. HEWs in Ethiopia are trained for a duration of one year, a long period compared to the duration of CHW training in the other countries. The question is, does this result in a better ability to establish trusting relationships, and a higher motivation and performance in the long term? Although not explicitly found in our study, trust from the side of the community could be enhanced by the idea that CHWs are competent and thus well-trained. The fact that expansion of curative tasks increased recognition from the community and feelings of self-fulfilment of the CHW, points into this direction. However, as shown in Figure 8.3, many other factors are also important in stimulating relationships to grow.

Strong relationships require trust (hence the use of the term "trusting relationships"). People need to invest time and effort into the relationship and must trust each other (Paillé, Grima, and Dufour 2015). Factors that influence levels of trust, such as

organizational support, feedback mechanisms and reward systems (Albrecht and Travaglione 2003; Nyhan 2000), have been identified by our study. The added value of our study is that it contains a holistic view, as CHWs' relationships with two sides, the communities and the health sector, were analysed. The dimensions of trust as presented by Hall et al. (2001), which include fidelity, competence, honesty, confidentiality and global trust were confirmed to be important with regard to CHWs' relationships with the community and health sector. Fidelity includes respect, agency, loyalty, caring and avoiding conflict of interest: attributes that were found to be important during selection of CHWs by community members. Connectedness, familiarity, serving the same goals, fairness and recognition were other dimensions of trust that emerged from our study.

Downwards accountability – from health sector towards community, was found to be weak in all countries, although the Kenyan CHW programme included most structures providing opportunities for information and feedback on CHW or programme performance. Community accountability is believed to enhance health systems' performance, but evidence is scarce (Molyneux et al. 2012). The finding that community accountability was limited, coupled with the observation that respondents did not bring up the correlation between the functioning of community accountability structures and trusting relationships, stresses the need for further research and action. Strengthening (existing) community accountability structures and linking them to health sector accountability structures is likely to have positive effects on relationships of CHWs with both communities *and* actors in the health sector (Lunsford et al. 2015).

It is challenging to compare CHW programmes in different countries with each other, as programmes have different set-ups and are situated in different socio-economic and cultural contexts. This large variance in context at the same time underpins the unique contribution of our study: it assists in identifying similarities and differences in contextual factors that shaped relationships between CHWs, communities and the health sector in different settings. This information is useful for CHW policy and programme development, but it should be taken into account that there are many different types of CHWs around the globe and that communities too are not homogenous, but diverse and evolving. We would like to be clear about the limitation attached to the chosen realist lens in data analysis and presentation. This study does not contain a full realist evaluation, but elements of a realist evaluation were used during the analysis of qualitative data from four countries. In addition, we stress the point made by Pawson that no realist study will ever be able to present a full picture of the context (Pawson et al. 2004). This applies to our study even more, as data were derived from a broader study on factors influencing performance of CHWs in the four countries, in which trusting relationships were found to be essential in enhancing CHW motivation and performance. Therefore, we do not claim to have a complete overview of all possible factors that shape relationships between CHWs, communities and actors in the health sector.

8.6 Conclusions and recommendations

This study demonstrates a complex interplay of influences on CHWs' relationships with their communities and actors in the health sector. In order to increase CHW motivation and performance, relationships between these actors need to be strong. Policy makers and programme managers should take into account broader and programme contexts, in order to trigger mechanisms that could generate trusting relationships. As outlined in the methods section and Figure 8.2, this study was partly conducted to input into the development of quality improvement interventions for the CHW programmes in Ethiopia, Kenya, Malawi and Mozambique. Currently, in the implementation districts of all countries, context-specific interventions that strengthen support structures from the side of the community and introduce supportive supervision of CHWs from the side of the health sector are being set up. These strategies aim to enhance trust and strengthen relationships between CHWs, communities and the health sector, which is needed to enable CHWs to respond to the opportunities offered by their unique intermediary position and promote universal health coverage.

PART 3 – Reflections